



Lessons Learning and Knowledge Management

NASA KM Workshop

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Task at Hand

- How do we strengthen the connection between KM and lessons learning...
 - Connect databases and systems?
 - Build the lessons into the processes?
 - Mandate use or reading of lessons learned?
 - Build the lessons into training?
 - Promote authors of good lessons learned to share, mentor, and connect with others?



Strategic Drivers

- A key aspect of KM is to capture, share, and internalize lessons so that people validate or change behaviors and can make good decisions
- For those outside KM, lessons learned are most often perceived as at the heart of KM
- LLIS redesign was an early KM pilot and noted in our Strategic Plan



Tactical Drivers—NIAT

- Promote the continuous capture, dissemination, and utilization of knowledge, and make checklists available to support Project managers
 - Capture checklists in LLIS database and APPL online tools to facilitate ready reference for project trams and independent reviewers

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Tactical Drivers—NIAT—LLIS

- Develop, with customers, a new lessons learned tool to effectively capture and utilize lessons learned
 - Define information (lessons and the project environment) that is relevant to the current environment
 - Capture and organize information for ready access
 - Reduce overhead and improve timeliness of posting
 - Include mechanism for rapidly developing information in a useful and interesting format
 - Identify external organizations which excel in KM and determine best practices
 - Select a pilot project to test and refine criteria, including a customer assessment
 - Address the cultural and process changes needed to encourage and reward knowledge sharing
 - Incorporate into relevant training



Tactical Drivers—GAO Audit

- NASA's KM efforts should lead to some improvement in the sharing of agency lessons and knowledge, but lack some critical success factors
- *Cultural resistance to sharing knowledge and the lack of strong support from Agency leaders often make it difficult to implement an effective lessons learning and knowledge sharing environment"

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Tactical Drivers—GAO Audit

- Successful organizations have overcome barriers by
 - Making a strong management commitment to knowledge sharing
 - Developing a well-defined business plan for implementing KM
 - Providing incentives to encourage knowledge sharing and application
 - Building technology systems to facilitate easier access to information
 - Facilitating communities of practice based around common interests
- "NASA has not done so on an Agency-wide basis"



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GAO Recommendations

- Articulating the relationship between lessons learning and KM through an implementation plan for KM
- Developing ways to broaden and implement mentoring and "storytelling" as mechanisms for lessons learning
- Identifying incentives to encourage more collection and sharing of lessons among employees and teams, such as links to performance evaluations and awards
- Tracking and reporting on the effectiveness of the agency's lessons learning efforts using objective performance metrics



GAO Recommendations (continued)

- Designating a lessons learned manager to lead and coordinate all agency lessons learning efforts
- ♣ Enhancing LLIS by coding information and developing an easier search capability to allow users to identify relevant lessons, including more positive lessons, providing a means to disseminate key lessons to users, and soliciting user input on an ongoing basis
- Establishing functional and technical linkages among the various center- and program-level lessons learning systems



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